Map Symbol	 Map Unit Name 	
BD	 	This is a somewhat poorly drained, strongly sloping soil on uplands. It is clayey throughout , or it has a thin loamy surface layer and a clayey subsoil. Runoff is rapid. Water and air move very slowly through this soil. A seasonal high water table is 2 to 4 feet below the surface. The soil is acid throughout and has low fertility. The subsoil has a very high shrink-swell potential.
 BP 	SLOPES 	This is a well drained, strongly sloping to moderately steep soil on uplands. It has thick sandy surface and subsurface layers and a loamy subsoil. The soil has low fertility and a low or moderate available water capacity. Permeability is rapid in the upper part of the soil and moderate in the lower part. Surface runoff is medium.
 Bc 	 	This is a somewhat poorly drained, gently sloping soil In uplands. It is clayey throughout, or it has a thin loamy surface layer and a clayey subsoil. Runoff is medium. Permeability is very slow. A seasonal high water table is 2 to 4 feet below the surface. Shrink- swell potential is very high. The soil is acid throughout and has low fertility.
 Bo 	SLOPES 	This well drained, gently sloping soil is on uplands. It has thick sandy surface and subsurface layers and a loamy subsoil. Natural fertility is low. Runoff is Islow. Water and air move rapidly through the sandy surface and subsurface layers, and they move at a moderate rate through the loamy subsoil. The available water capacity is low.
 Br 	OCCASIONALLY FLOODED - 	This is a level, poorly drained soil that contains a high amount of sodium in the subsoil. It is on terraces. The soil is subject to occasional flooding. It is loamy throughout. A seasonal high water table ranges from the surface to 1.5 feet below the surface. Permeability is slow. Fertility is low.
	SLOPES 	This well drained, very gently sloping or gently sloping soil is on low stream terraces. It is loamy throughout, or it has a sandy surface layer and a lloamy subsoil. Runoff is medium. Water and air move at a moderate rate through the subsoil. The soil dries quickly after rains. Plants are damaged by a lack of moisture during dry periods in summer and fall.
 Da 	SLOPES 	This is an excessively drained, gently sloping sandy soil on terraces. The soil is sandy throughout and has la low available water capacity. Perneability is rapid. Fertility is low. The shrink-swell potential is low. Runoff is very slow.
 Dp 		This miscellaneous area consists of piles of rock

 Map Symbol	 Map Unit Name 	
Fz Fz 	SLOPES	These soils are nearly level and are on terraces. The
 GO 		This moderately well drained, moderately sloping to strongly sloping soil is on side slopes on uplands. It has a loamy surface layer and a clayey subsoil. The soil is acid throughout and has low fertility. Runoff is rapid, and water moves very slowly through the subsoil. The subsoil has a very high shrink-swell potential. In places, the soil is moderately eroded.
 GY 		This level, poorly drained soil is on flood plains. It is subject to frequent flooding. The soil is loamy throughout. It has low natural fertility. Surface runoff and permeability are slow. A seasonal high water table ranges from the surface to a depth of labout 1.5 feet.
 Ga 	 GALLION SILT LOAM, RARELY FLOODED - - 	This is a level, well drained soil on alluvial plains. It is subject to rare flooding. The soil is loamy throughout. Natural fertility is high. Perneability is moderate. Surface runoff is slow. The shrink-swell potential in the subsoil is moderate.
 Gc 		This moderately well drained, very gently sloping soil is on uplands. It is loamy throughout. Natural fertility is moderately low. Runoff is medium. Water and air move slowly through the subsoil. A seasonal high water table is about 2 to 3 feet below the surface in winter and spring. The subsoil has a moderate shrink-swell potential.
 Hw 	 	This gently sloping, moderately well drained soil is on uplands. It has a black, loamy surface layer and a clayey underlying material. The underlying material is alkaline and contains accumulations of lime. Natural fertility is high. Surface runoff is medium. Permeability is very slow. The shrink-swell potential is high.
 Ke 	 	This gently sloping, well drained soil is calcareous and alkaline throughout. It is on uplands. The soil is loamy throughout, or it has a loamy surface layer and a loamy and clayey subsoil. Surface runoff is medium, and permeability is slow. The soil has a high shrink- swell potential. Natural fertility is medium.
 Ko 	 	This moderately well drained, very gently sloping or gently sloping soil is on terraces. It is loamy in the upper part of the subsoil and clayey in the lower part. Natural fertility is low or moderately low. Runoff is slow to medium. Water and air move slowly or very slowly through the clayey part of the subsoil. A seasonal high water table is perched on the clayey subsoil for long periods in winter and spring. In places, the soil is moderately eroded.

Map Symbol	 Map Unit Name 	 Nontechnical Descriptions
МВ	SLOPES 	This well drained, moderately sloping to strongly sloping soil is on uplands. It has a loamy or gravelly surface layer and a clayey subsoil. Natural fertility is low. Runoff is rapid. Water and air move very slowly through the subsoil. The subsoil has a high shrink-swell potential. In places, the soil is moderately eroded.
Ma	SLOPES	This well drained, very gently sloping to gently sloping soil is on uplands. It has a loamy surface layer and a clayey subsoil. Natural fertility is low. Runoff is medium. Water and air move very slowly through the subsoil. The subsoil has a high shrink- swell potential. In places, the soil is moderately leroded.
Me	 	This nearly level, somewhat poorly drained soil is on broad ridgetops on uplands. It has a loamy surface layer. The subsoil is loamy in the upper part and clayey in the lower part. Natural fertility is low. The soil has a seasonal high water table. It has a high shrink-swell potential in the subsoil. Permeability is very slow. Surface runoff is medium.
Mo		This level, somewhat poorly drained soil is on the flood plains of the Red River. It is occasionally flooded. The soil is clayey throughout. A seasonal high water table ranges from the surface to a depth of about 1.5 feet. Permeability is very slow. Shrink- swell potential is very high. The soil has high natural fertility.
OL	SLOPES 	This strongly sloping, moderately well drained soil is On side slopes on uplands. It has a loamy surface layer and a clayey subsoil. The soi is acid in the lupper part and neutral or alkaline in the lower part. Natural fertility is low. Permeability is very slow. Surface runoff is rapid. The soil has a high shrink- swell potential in the subsoil.
Ok	 OKTIBBEHA SILT LOAM, 1 TO 5 PERCENT SLOPES 	This gently sloping, moderately well drained soil is on ridgetops on uplands. It has a loamy surface layer and a clayey subsoil. The soil is acid in the upper part and neutral or alkaline in the lower part. Natural fertility is low. Permeability is very slow. Surface runoff is medium. The soil has a high shrink- swell potential in the subsoil.
Os	SLOPES 	This soil is nearly level and poorly drained. It is in seepy areas on terraces. The surface layer is loamy and the underlying material is sandy. Natural fertility is low. Permeability is rapid. A seasonal high water table is within 1 foot of the surface for 3 to 6 months or more. The available water capacity is very low to moderate.
Pe	 	This level, poorly drained soil is on the flood plain of the Red River. It is clayey throughout and has medium natural fertility. The soil is subject to occasional flooding. Permeability is very slow. A seasonal high water table ranges from the surface to a depth of about 2 feet. The shrink-swell potential is very high.

 Map Symbol	 Map Unit Name 	Nontechnical Descriptions
 Pg 	PITS, GRAVEL	This map unit consists of open excavations from which sand and gravel have been removed. The areas range from gently sloping to steeply sloping. They generally are barren of vegetation.
 Pr 	 PITS, QUARRY 	This map unit consists of open excavations from which rock is being mined. The sides of the pits are vertical and the floor is nearly level. The areas are barren of vegetation.
 Ra 	ROXANA SILT LOAM, OCCASIONALLY FLOODED	This well drained, undulating soil is on parallel ridges and swales on natural levees on the Red River alluvial plain. The soil is subject to occasional flooding for brief to very long periods. This soil is loamy throughout and has high fertility. Runoff is slow. Movement of water and air through the soil is moderate.
 Ro 	 ROXANA SILT LOAM, FREQUENTLY FLOODED - - 	This well drained, undulating soil is on ridges and swales on the Red River alluvial plain. It is on the unprotected side of the man-made levee and is subject to frequent flooding. This soil is loamy throughout and has high fertility. Runoff is slow. Movement of water and air through the soil is moderate.
 Rr 		These gently undulating, loamy and clayey soils are in a ridge and swale landscape on the flood plain of the Red River. They are subject to occasional flooding. The areas are about 50 percent Roxana soil and 50 percent Moreland soil. The Roxana soil is on ridges. It is well drained and loamy throughout. The Moreland soil is in swales. It is somewhat poorly drained and clayey throughout.
 Rs 	RUSTON FINE SANDY LOAM, 1 TO 5 PERCENT SLOPES	This well drained, very gently sloping to gently sloping soil is on uplands. It is loamy and acid throughout. Natural fertility is low. Runoff is medium. Water and air move through the soil at a moderate rate. Plant roots penetrate this soil easily. The soil dries quickly after rains. In places, the soil is moderately eroded.
 SC 		This moderately well drained, moderately sloping to strongly sloping soil is on side slopes on uplands. It has a loamy surface layer and a clayey subsoil. Runoff is rapid. Water and air move slowly or very slowly through the subsoil. The soil is acid throughout and has low fertility. The subsoil has a high shrink-swell potential. In places, the soil is moserately eroded.
 SM 	 SMITHDALE FINE SANDY LOAM, 5 TO 20 PERCENT SLOPES 	This well drained, strongly sloping or moderately steep soil is on side slopes on uplands. It is loamy and acid throughout. Natural fertility is low. Runoff is rapid. Movement of water and air through the soil is moderate. In places, the soil is moderately eroded.
 Sa 		This moderately well drained, gently sloping soil is

 Map Symbol 	 Map Unit Name 	
Sh	SLOPES	This moderately well drained, very gently sloping or gently sloping soil is on terraces or uplands. It is loamy throughout and has a fragipan in the subsoil which restricts plant roots. Natural fertility is low or moderately low. Runoff is medium. Water and air move through the upper part of the subsoil at a moderate rate, and they move slowly or moderately slowly through the fragipan. A seasonal high water table perches on the fragipan for short periods. In places, the soil is moderately eroded.
 Sk 	PERCENT SLOPES	This moderately well drained, very gently sloping or gently sloping soil is on terraces or uplands. It is loamy throughout and has a fragipan in the subsoil which restricts plant roots. Natural fertility is low or moderately low. Runoff is medium. Water and air move through the upper part of the subsoil at a moderate rate, and they move slowly or moderately slowly through the fragipan. A seasonal high water table perches on the fragipan for short periods. In places, the soil is moderately eroded.
 Va 		This nearly level, somewhat poorly drained soil is on
 YO	 	This level, very poorly drained soil is in low